Wilkes Barre, PA Chesapeake Bay TMDL Public Meeting Summary

November 17, 2009

Bentley's of Northern Pennsylvania
2300 Rt. 309
Ashley, PA 18706

Agenda

- Welcome, introductions, and meeting logistics – Jennifer Sincock, EPA (5 minutes)

- EPA presentation on the Chesapeake Bay TMDL and EPA expectations – Richard Batiuk and Bob Koroncai, EPA (45 minutes)

- Public comments, questions and answers – Jennifer Sincock, EPA (60 minutes)

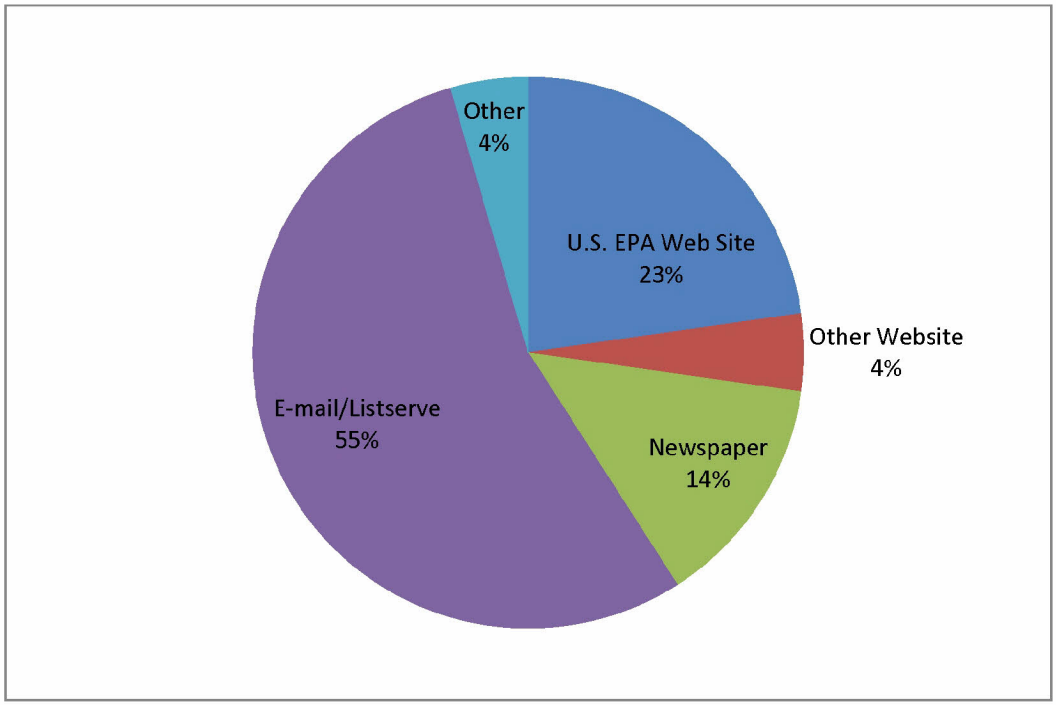
- Adjourn

Attendee Details

Total Attendees: 45

Registration Question:
How did you hear about this Meeting?

- U. S. EPA Web Site (5)
- Other Web Site _____ (1)
- Newspaper (3)
- E-mail/Listserve (12)
- Other (1)



THE CHESAPEAKE BAY TMDL: Restoring Waters of Pennsylvania and the Chesapeake Bay

Bay TMDL Public Meeting
November 17, 2009
Wilkes-Barre, PA

Richard Batiuk and Bob Koroncai
U.S. EPA Region III

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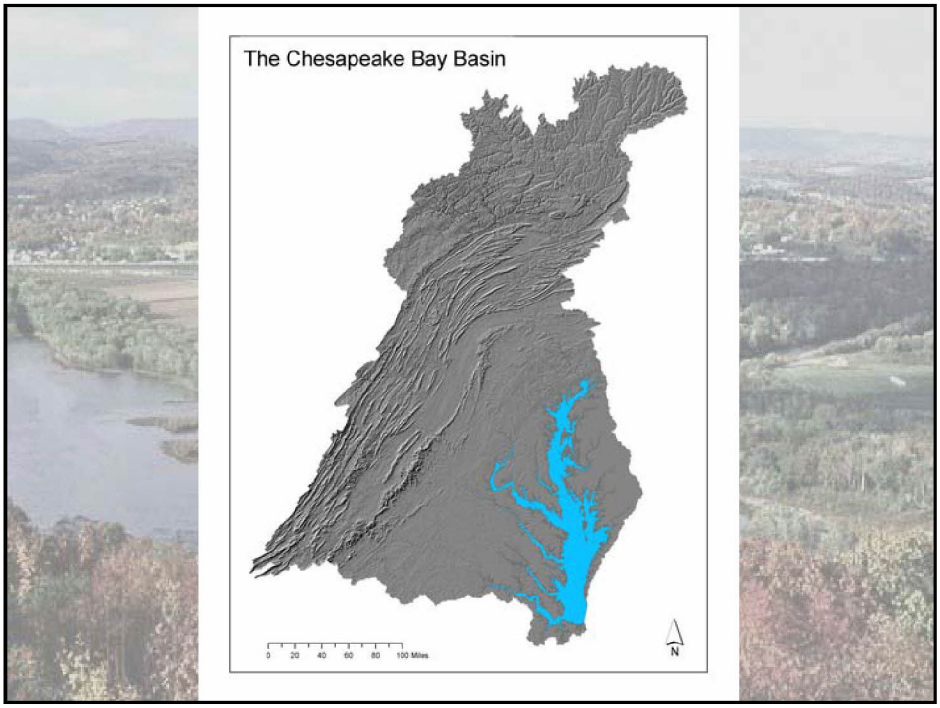
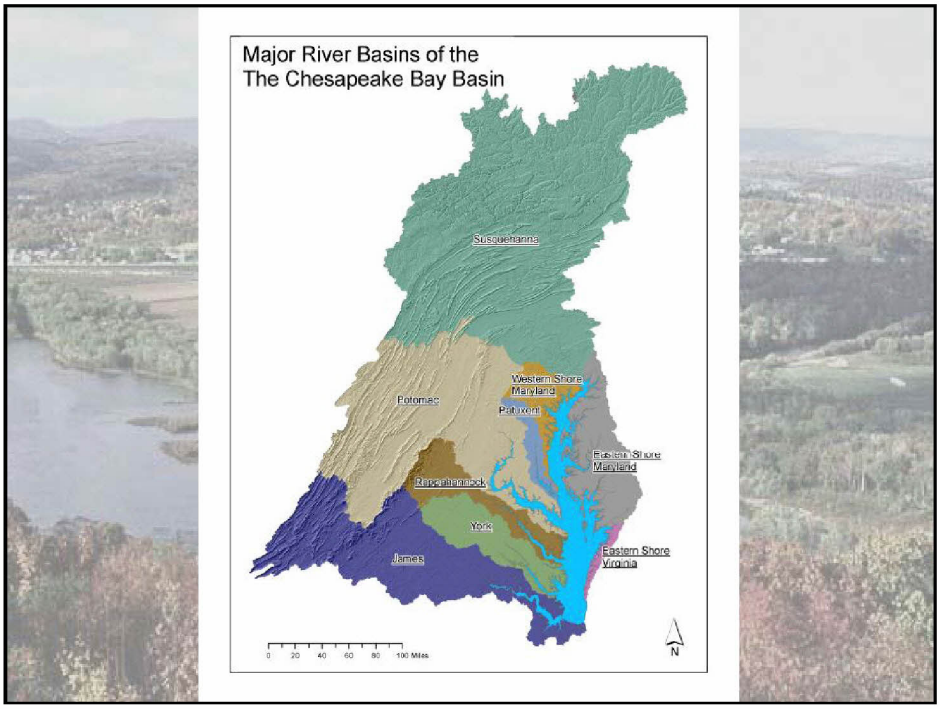
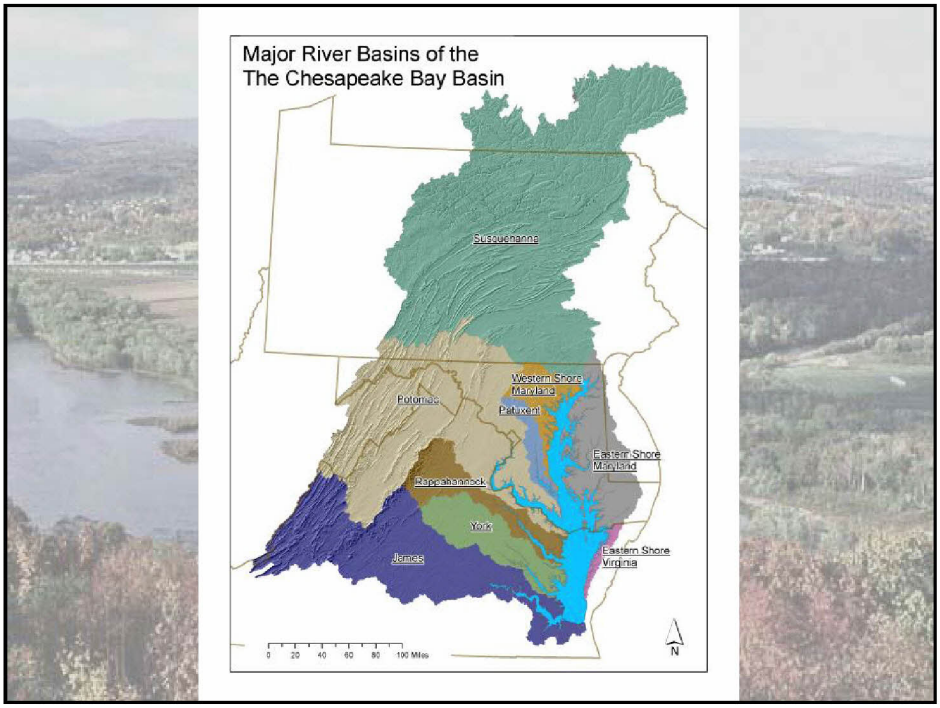

The Chesapeake Bay Basin
0 20 40 60 80 100 Miles
N


Major River Basins of the
The Chesapeake Bay Basin
Susquehanna
Potomac
Western Shore Maryland
Patuxent
Eastern Shore Maryland
Rappahannock
York
James
Eastern Shore Virginia
0 20 40 60 80 100 Miles
N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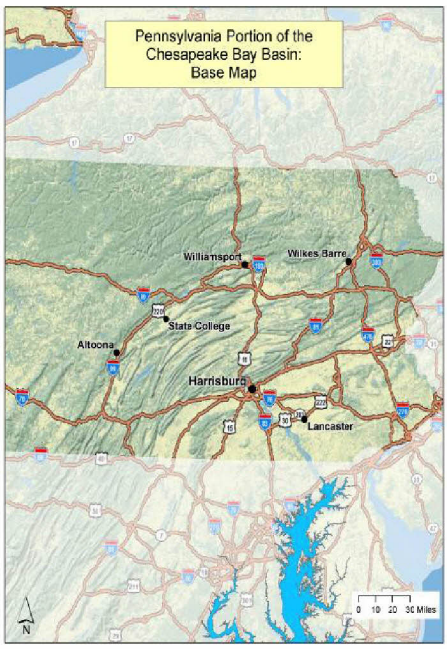
James
Eastern Shore Virginia
0 20 40 60 80 100 Miles
N


Local Water Quality Issues

Pennsylvania's Susquehanna River and Chesapeake Bay Basin

- PA encompasses 35.2% of the Bay watershed -- that's 14,358,159 acres
- Four PA watersheds
  - Susquehanna River (13,298,520 acres, 32.6%)
  - Potomac River (1,012,222 acres, 2.5%)
  - Eastern Shore (40,262 acres, 0.1%)
  - Western Shore (7,155 acres, 0.02%)
- Impaired PA waters due to major sources including:
  - Agriculture
  - Mine drainage
  - Urban runoff/stormwater



Local Water Issues

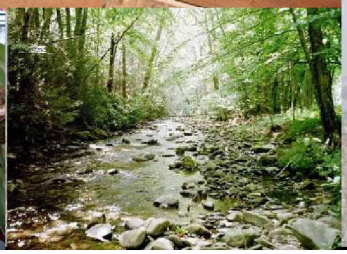
"We absolutely have to work together cooperatively to reduce nitrogen, phosphorous and sediment entering the bay."

State Senator Mike Brubaker

Intelligencer Journal Lancaster New Era

10/21/09

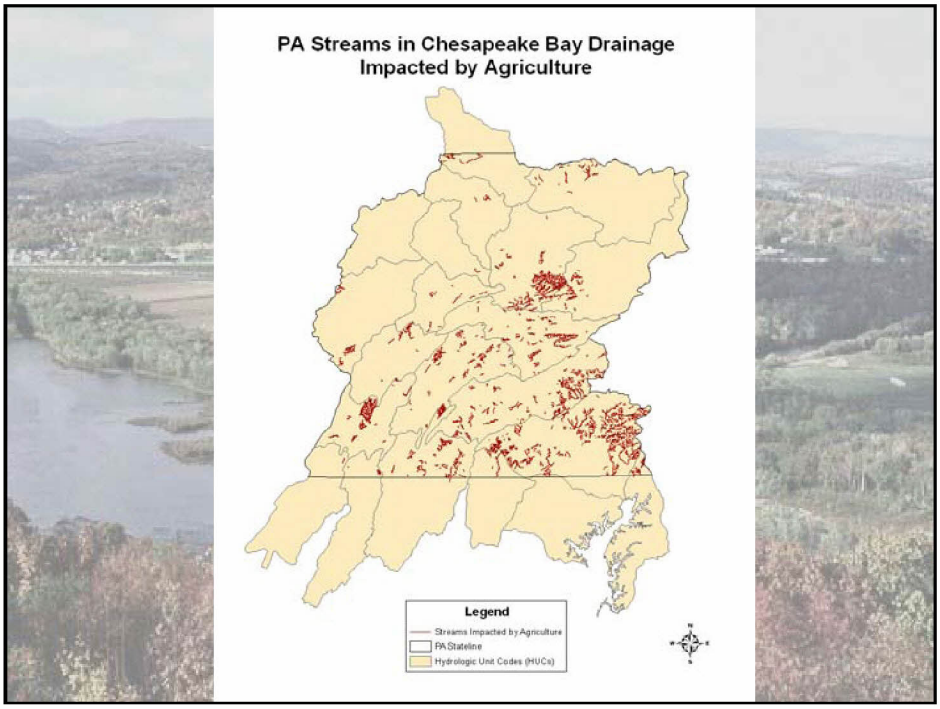
Local Water Issues

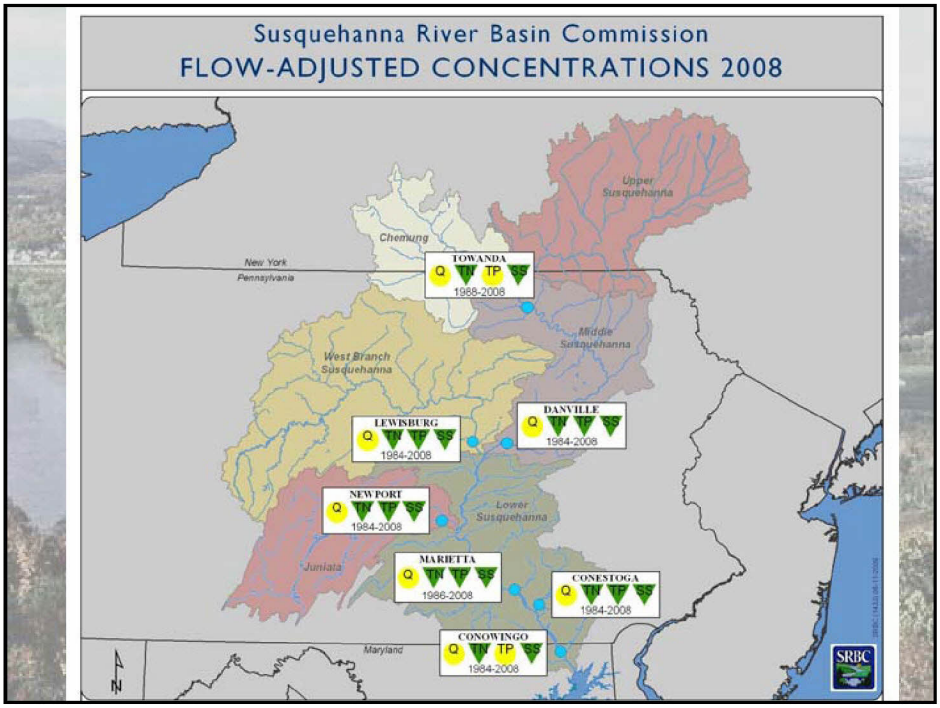


"I think Pennsylvanians love their water and farmers love their water. We take pride in facing up to some shortcomings and pride in the cleanups that have already occurred."

DEP Secretary John Hanger

Intelligencer Journal Lancaster New Era
11/10/09





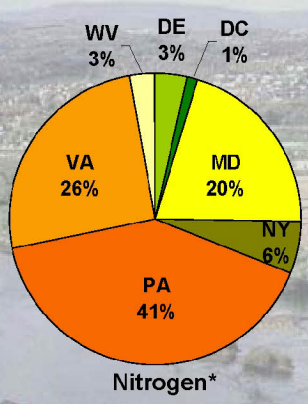
Chesapeake Bay Water Quality Issues

Chesapeake Bay Watershed-
By the Numbers

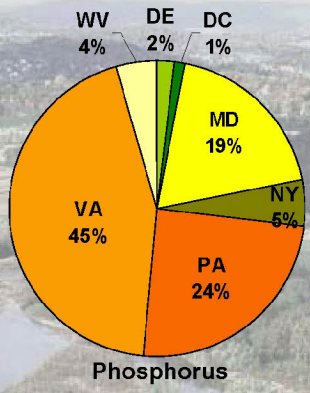
- Largest U.S. estuary
- Six-states and DC, 64,000 square mile watershed
- 10,000 miles of shoreline (longer then entire U.S. west coast)
- Over 3,600 species of plants, fish and other animals
- Average depth: 21 feet
- $750 million contribution annually to local economies
- Home to 17 million people (and counting)
- 77,000 principally family farms
- Declared “national treasure” by President Obama

Source: www.chesapeakebay.net

Nutrient Loads by State

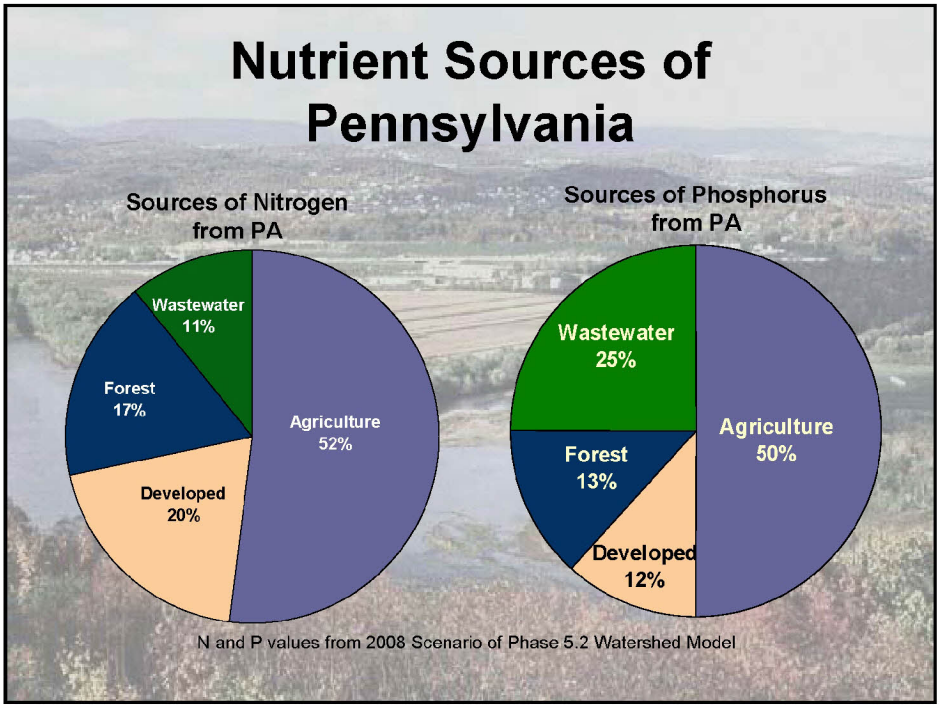


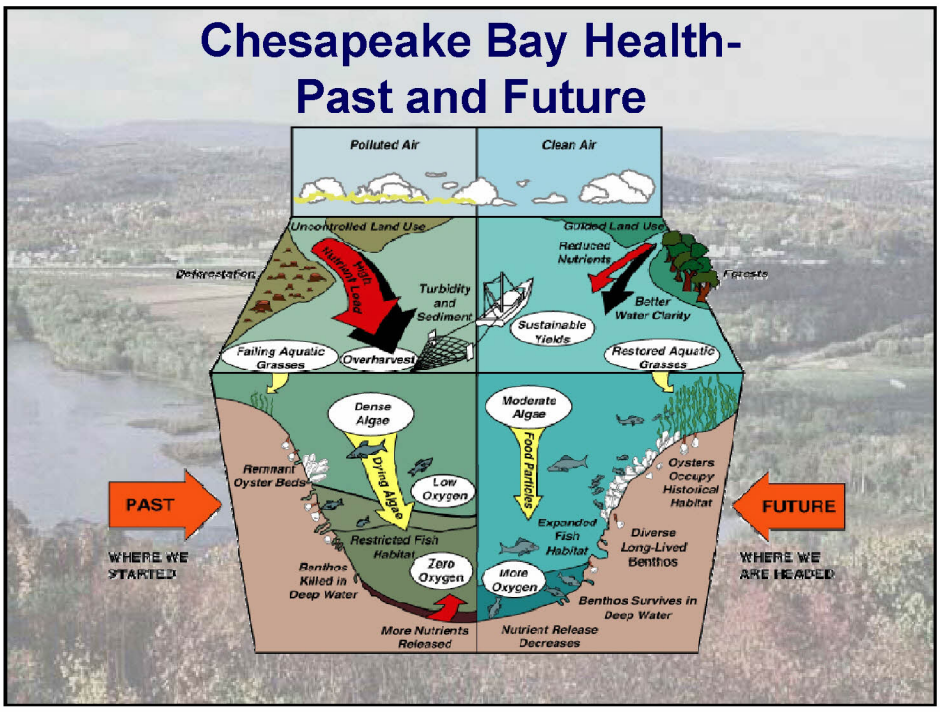
Nitrogen*

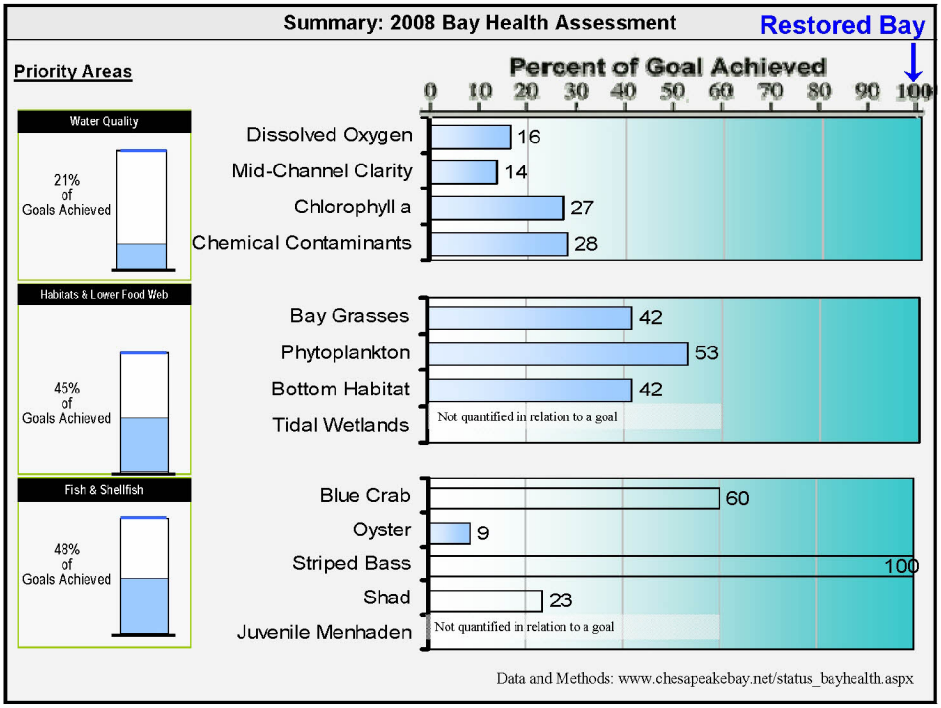


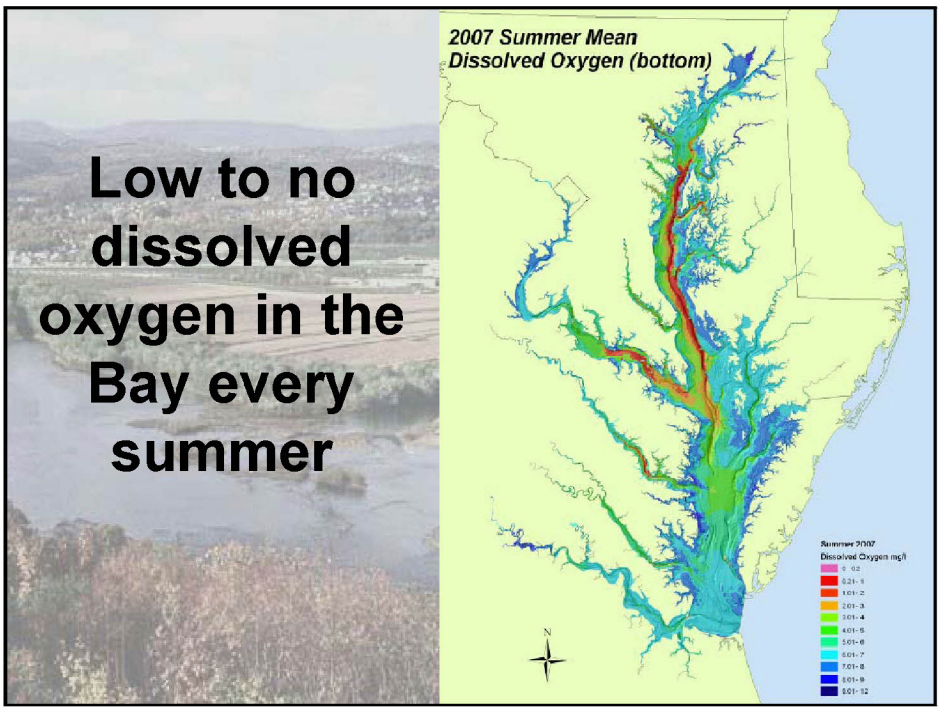
Phosphorus

*EPA estimates a nitrogen load of 284 million lbs nitrogen in 2008. EPA assumes a reduction of 7 million lbs due to the Clean Air Act. This leaves 77 millions lbs to be addressed through the TMDL process.


Nutrient Sources of Pennsylvania
Sources of Nitrogen from PA
Wastewater 11%
Forest 17%
Agriculture 52%
Developed 20%
Sources of Phosphorus from PA
Wastewater 25%
Forest 13%
Agriculture 50%
Developed 12%
N and P values from 2008 Scenario of Phase 5.2 Watershed Model

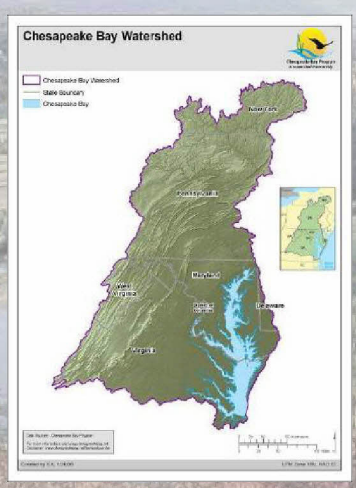

Chesapeake Bay Health- Past and Future
Polluted Air
Clean Air
Uncontrolled Land Use
Guided Land Use
Deforestation
High Nutrient Load
Turbidity and Sediment
Reduced Nutrients
Forests
Better Water Clarity
Sustainable Yields
Failing Aquatic Grasses
Overharvest
Restored Aquatic Grasses
Dense Algae
Drying Algae
Low Oxygen
Remnant Oyster Beds
Restricted Fish Habitat
Zero Oxygen
Benthos Killed in Deep Water
More Nutrients Released
Moderate Algae
Food Particles
Oysters Occupy Historical Habitat
Expanded Fish Habitat
Diverse Long-Lived Benthos
More Oxygen
Benthos Survives in Deep Water
Nutrient Release Decreases
PAST
WHERE WE STARTED
FUTURE
WHERE WE ARE HEADED


Summary: 2008 Bay Health Assessment
Restored Bay
Priority Areas
Percent of Goal Achieved
0 10 20 30 40 50 60 70 80 90 100
Water Quality
21% of Goals Achieved
Dissolved Oxygen 16
Mid-Channel Clarity 14
Chlorophyll a 27
Chemical Contaminants 28
Habitats & Lower Food Web
45% of Goals Achieved
Bay Grasses 42
Phytoplankton 53
Bottom Habitat 42
Tidal Wetlands
Not quantified in relation to a goal
Fish & Shellfish
43% of Goals Achieved
Blue Crab 60
Oyster 9
Striped Bass 100
Shad 23
Juvenile Menhaden
Not quantified in relation to a goal
Data and Methods: www.chesapeakebay.net/status_bayhealth.aspx

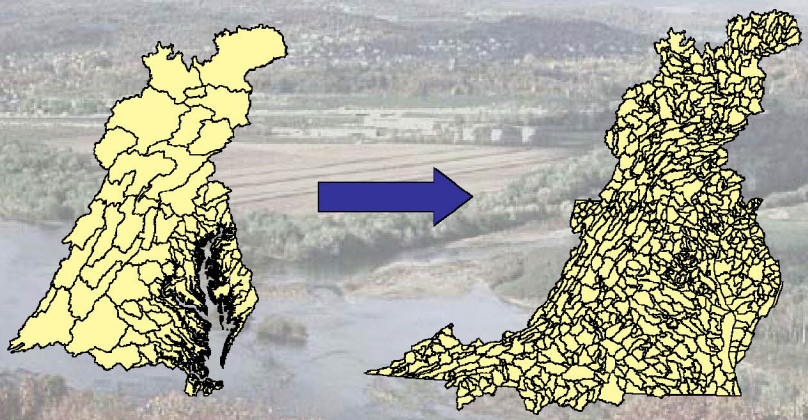

Low to no dissolved oxygen in the Bay every summer
2007 Summer Mean
Dissolved Oxygen (bottom)

The Chesapeake Bay TMDL

- EPA sets pollution diet to meet states' Bay clean water standards
- Caps on nitrogen, phosphorus and sediment loads for all 6 Bay watershed states and DC
- States set load caps for point and non-point sources



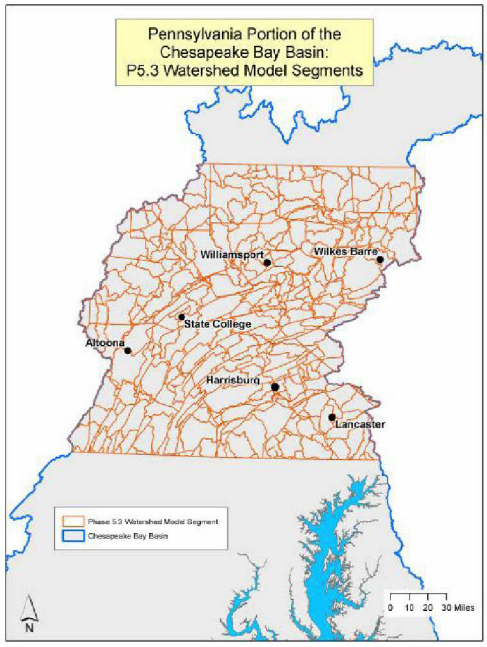
The Bay science supports local pollution diets…



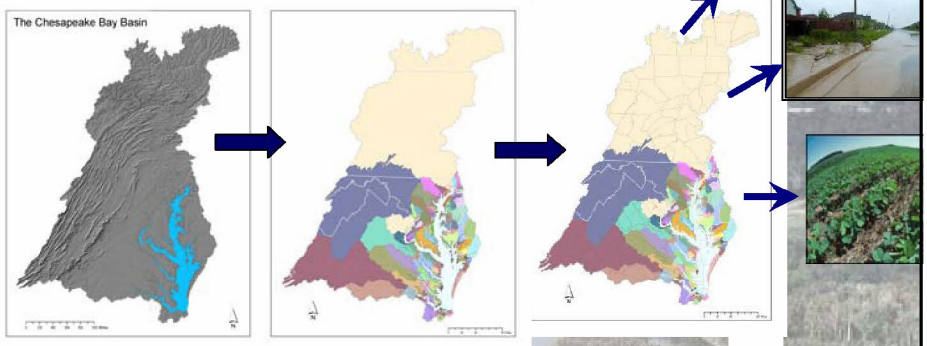
Phase 4 Bay Watershed Model
(2000-2008)

Phase 5 Bay Watershed Model
(2009-)

…with detailed representation of PA's local watersheds



Taking Responsibility for Load Reductions



Identify basinwide target loads

EPA, States, DC

Identify major basin by jurisdiction target loads

EPA, States, DC

Identify tidal segment watershed, county and source sector target loads

States, DC, local governments & local partners

What are the Target Pollutant Cap Loads for the Bay Watershed?

Current model estimates are that the states' Bay water quality standards can be met at basinwide loading levels of:

- 200 million pounds nitrogen per year
- 15 million pounds phosphorus per year

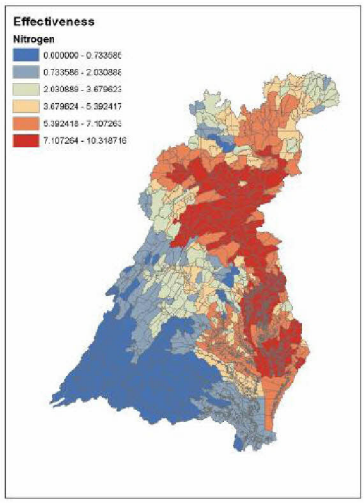
(Sediment target cap load under development-will be available by spring 2010)

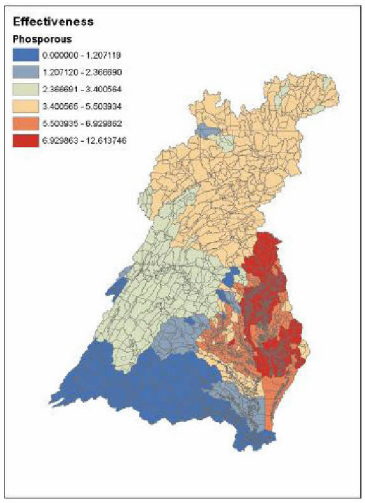
Dividing the Basinwide Target Loading

Guidelines for Distributing the Basinwide Target Loads

- Water quality and living resource goals should be achieved.
- Waters that contribute the most to the problem should achieve the most reductions.
- All previous reductions in nutrient loads are credited toward achieving final cap loads.

Nutrient Impacts on Bay WQ





Current State Target Loads

Nitrogen

State	Tributary Strategy	Target Load
DC	2.12	2.37
DE	6.43	5.25
MD	42.14	41.04
NY	8.68	10.54
PA	73.17	73.64
VA	59.30	59.22
WV	5.69	5.71
Total	197.53	197.76

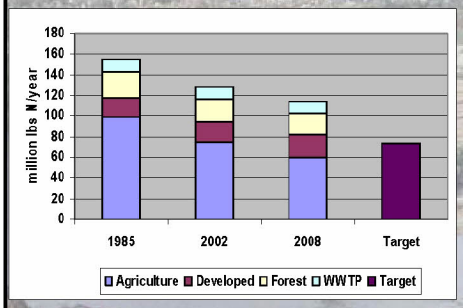
Phosphorus

State	Tributary Strategy	Target Load
DC	0.10	0.13
DE	0.25	0.28
MD	2.56	3.04
NY	0.56	0.56
PA	3.10	3.16
VA	7.92	7.05
WV	0.45	0.62
Total	14.93	14.84

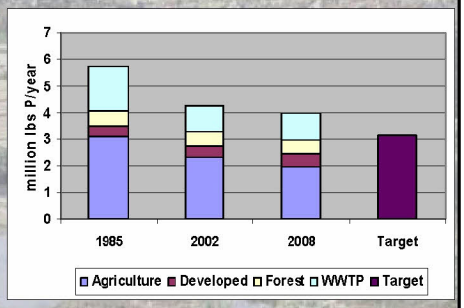
All loads are in millions of pounds per year.

PA's Past, Present and Future Estimated Loads

Nitrogen



Phosphorus

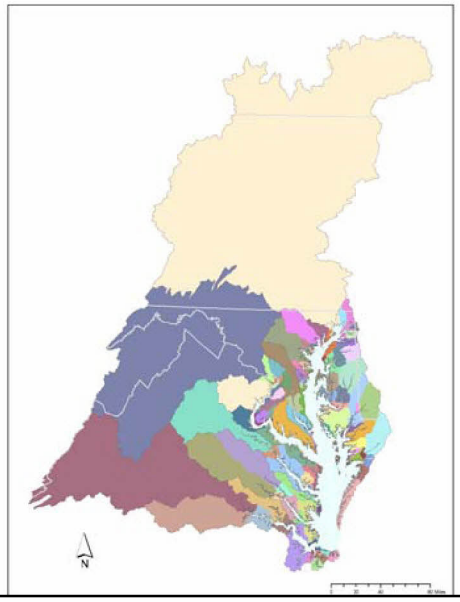


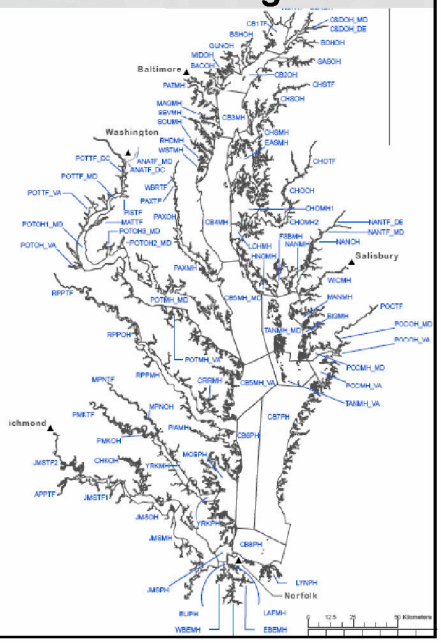
All scenarios run through Phase 5.2 Watershed Model

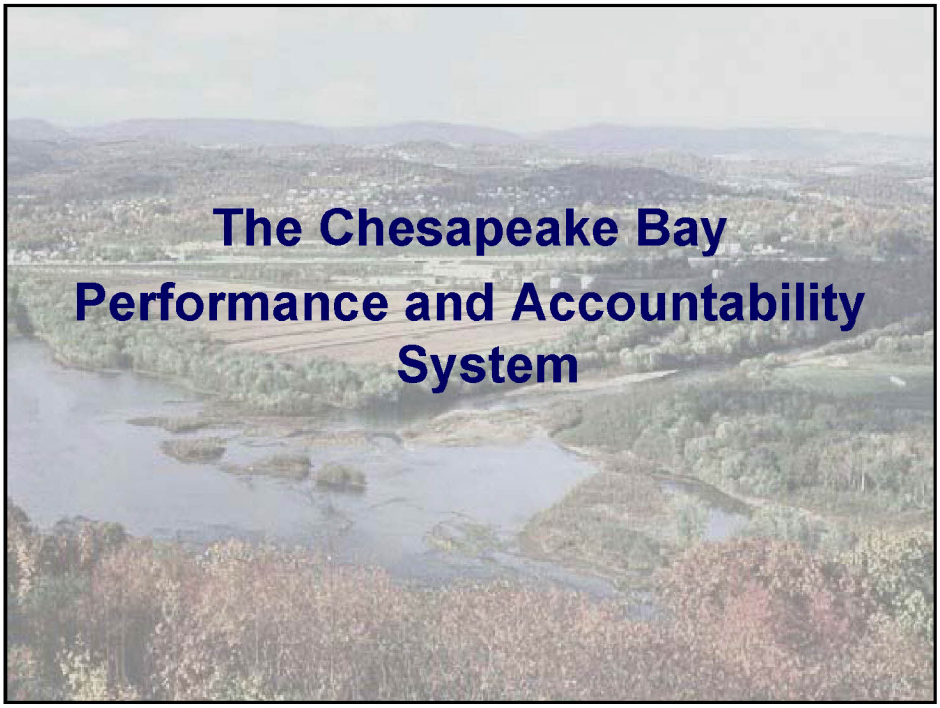
Target Load Refinements

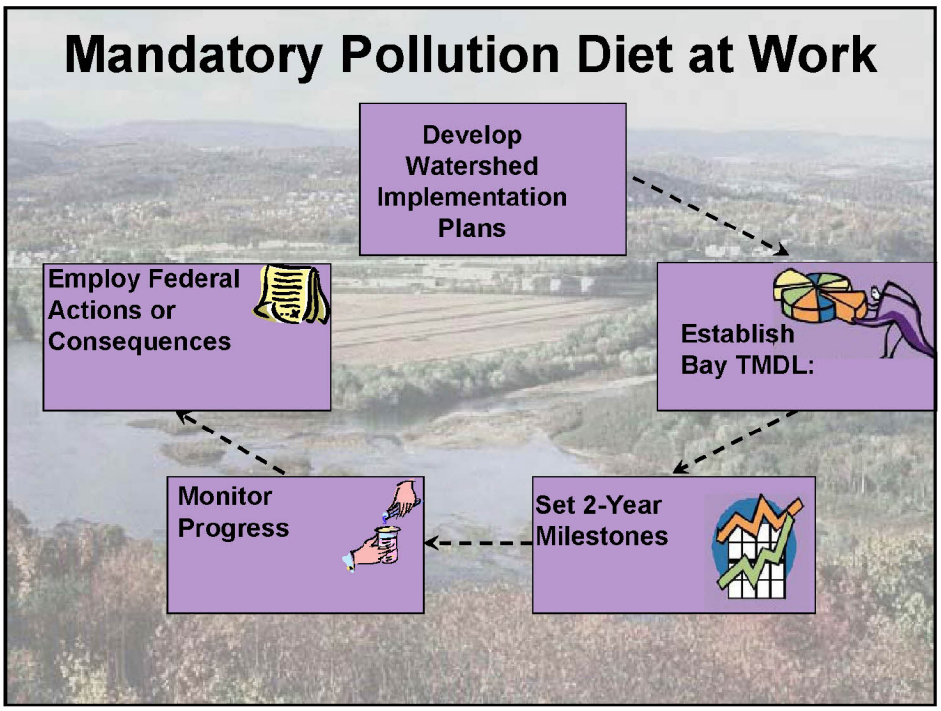
- If States' Bay Water Quality Standards can still be achieved…
  - The State may exchange nitrogen and phosphorus target loads within a basin; and/or
  - The State may exchange nitrogen and phosphorus loads from one basin to another within the State.

Pollution Diet for Each Tidal Water Segment





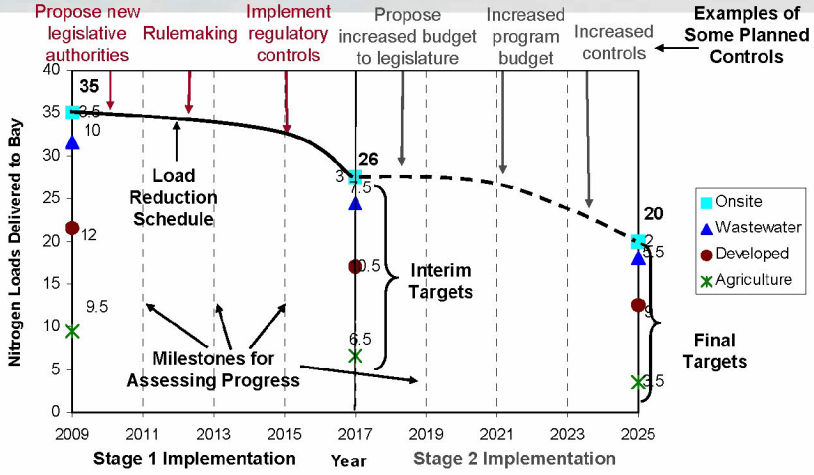

The Chesapeake Bay
Performance and Accountability
System


Mandatory Pollution Diet at Work
Develop Watershed Implementation Plans
Establish Bay TMDL:
Set 2-Year Milestones
Monitor Progress
Employ Federal Actions or Consequences

Watershed Implementation Plan Expectations

- Identify allowable loads by major river basin, tidal segment watershed, county and pollutant source sector
- Identify Program gaps and strategy
- Commit to develop and implement 2-year milestones at the county scale
- Develop contingencies

Example: Projected Nitrogen Delivery from Major Basin in Each Jurisdiction by Source Sector



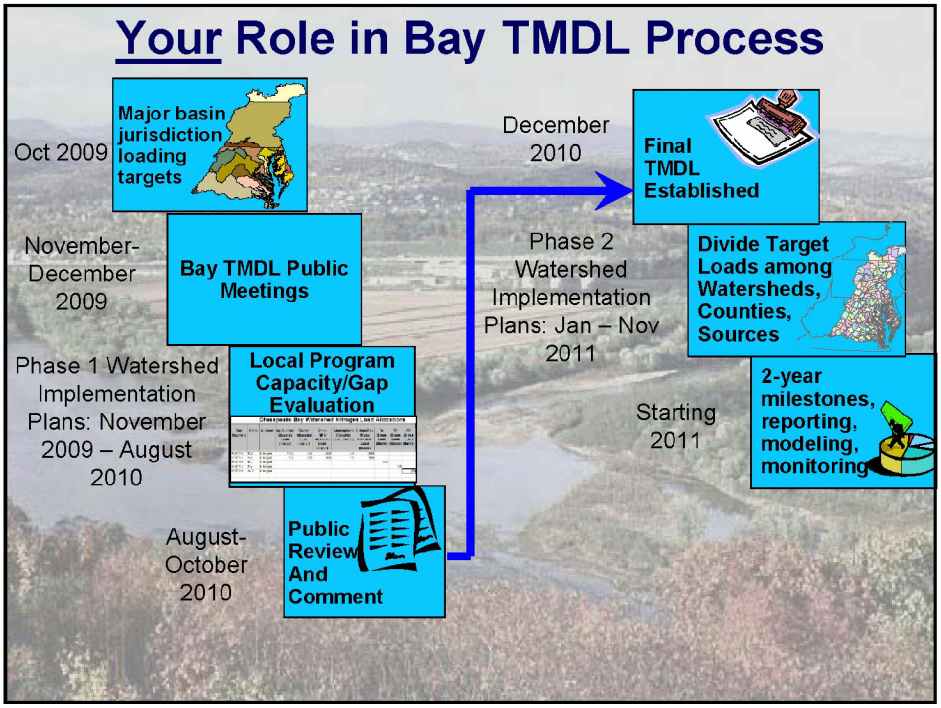
- Also divide jurisdiction load by 303(d) segment drainage area and, by November 2011, local area
- Attain jurisdiction-wide load reductions by the interim target, or justify why can still meet final target
- Jurisdiction would determine desired 2-year schedule to meet interim and final target loads
- EPA first evaluates milestones based on consistency with jurisdiction target load. EPA accepts shifts among source sectors, basins, segment drainages, and local areas if jurisdiction target load is met and local and Bay water quality goals are achieved

Federal Consequences

- Directed at states not achieving expectations
- Will be outlined in an EPA letter this fall. May include:
  - Assigning more stringent pollution reductions to regulated point sources (e.g., wastewater, stormwater, CAFOs)
  - Objecting to state-issued NPDES permits
  - Limiting or prohibiting new or expanded discharges (e.g., wastewater, stormwater) of nutrients and sediment
  - Withholding, conditioning or reallocating federal grant funds

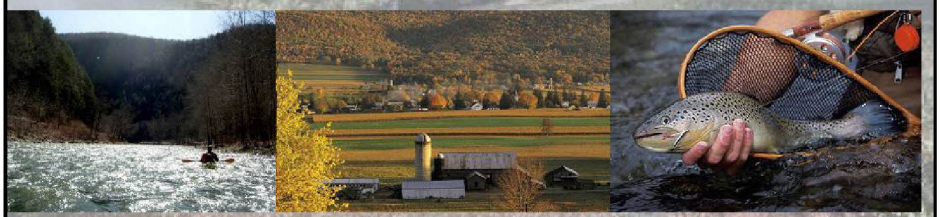
Bay TMDL- Presidential Executive Order Connections

- Create Federal Leadership Committee
- Create the Performance and Accountability Framework
- Expand regulatory tools for CAFO's and urban and suburban runoff
- Improve nutrient and sediment controls on federal lands and roads
- Target farm conservation measures at high priority areas



Bay TMDL: Bottom-line

- Actions will clean and protect local waters in DC thereby supporting the local economy
- Restore a thriving Chesapeake Bay
- Federal, state, local officials and agencies will be fully accountable to the public
- Consequences for inaction, lack of progress



Further Information

- Chesapeake Bay TMDL web site
  www.epa.gov/chesapeakebaytmdl
- U.S. EPA Region 3 Contacts
  - Water Protection Division
    - Bob Koroncai
      - 215-814-5730; koroncai.robert@epa.gov
    - Jennifer Sincock (sincock.jennifer@epa.gov)
  - Chesapeake Bay Program Office
    - Rich Batiuk
      - 410-267-5731; batiuk.richard@epa.gov
    - Katherine Antos (antos.katherine@epa.gov)


Thank you for your participation.
THANK YOU
That concludes today's meeting.

Questions Answered

Questions Answered (in the order which they were asked):

The number indicates the number given to the card prior to passing them out to the audience for tracking purposes.

A37a. Does the EPA or PADEP anticipate imposing load limits on CSO discharges?

A37b. Does EPA or PADEP anticipate revising total nitrogen and total phosphorus load limits on Phase II POTW's as a result of this TMDL?

A38b. What effect does EPA believe this should/would have on home building? (Shaw Prohask)

A40a. Who decides the load limits of N:P to be exchanged within basins, DEP or SRBC?

A40b. Main effects and effort needs to be on "agriculture" nonpoint source impacts! Do states have the resources and programs to enforce?

A60a. How is PADEP supposed to develop the localized load allocations during 2010 when there have been major staff reductions within their professional staff?

A60b. What is the point of 2017 revised targets when the present PA Tributary Strategy contemplates the initial strategy will barely be complete by 2017?

A32. How is the Marcellus Shale activity in PA being addressed by EPA with the Chesapeake Bay Strategy? Specifically- TDS issues and unknown fracking chemicals now in the environment.

A47. With millions and millions of gallons of water taken from the West Branch every day and pumped into the shale wells; 80 percent of which will never come back up to the water table, how long before we are "out of water" like out in Western U.S. and the Bay will be "salt water" up to Pennsylvania?

A33a. Relating to the phase 5 bay watershed model:

a. What are the sources of the data (water quality monitoring-baseline)?
b. How reliable, accurate and recent is the data?

A33b. How will it be ascertained at local levels that water quality goals are being met? Monitoring?

A50. Why are there not more regulations and inspections in place for big industry? What is most important than water and air? There is not enough urgency put on these areas.

Questions Submitted

Questions submitted but not answered:

A38a. Why is the residential building industry being so hard hit with this issue?

Comments

Fred Murray

Fred Murray has been fishing since he was 7 years old. He can remember Cherokee Rum, a tributary from Bowman's creek where he used to catch Brook Trout. The old streams are still there but now you cannot catch native brook trout. Over the years on Long Island he fished for Striped Bass. He went all the way out to Montog Point (New York harbor is 120 miles away). He has a pine that he received in 1968 when he belonged to a club for Stripe Bass fishing contests. They would land fish off the beach for points and the fish had to be 10 pounds to count for points. His pin represents 86 Striped Bass he caught in one day and for that he only received second place. Frank moved to Pennsylvania again some 30 miles up from Hyannis. From 1970 - 1985 he caught Tail Dragger over 35 pounds and 10 - 15 pound Groupers. In 1985 he helped try to make Striped Bass a game fish with an opening day, closing day, and fishing limit. One day he saw gang with a 2500 foot net in the water. When they pulled in the net they almost could not move it because it was packed with Stripe Bass. They shipped all those down the coast line.

Everyone blames everyone else for the demise of the Striped Bass. From 1985 the problem was in Chesapeake Bay. It was Pennsylvania Department of Agriculture and the dairy industry. The pesticides they used ran off of the fields. Once Pennsylvania was number 3 for wild pheasant hunting but now they are all gone—Columbia County has no pheasants. Fish eggs will not hatch because the eggs die in the mothers. The breeding grounds of the Striped Bass have been wiped out. Nobody can make a living dredging oysters anymore. Streams come out from a prison near his home (Bedlack creek.) When he was a kid it was loaded with Caddis and "green grapes". Now the stream is dead from all the outflow. Anyone can come to his land and observe that. Red Run is a local creek and it comes right out of a coal mine. The mine was shut down due to swamping and Red Run comes out of there. Bulldozers and back hoes destroyed the area and the USACE ruined it with dredging.